

**88.—UNEXPLAINED VARIATIONS IN THE YIELD OF OIL FROM COD LIVERS.****By W. H. SCHIEFFELIN & CO.**

[From letter to Prof. S. F. Baird.]

The result of the cod-fishery on the Norwegian coast this season is remarkable. We are at a loss to account for such a state of affairs. A letter from Bergen, dated March 6, states the result of the fishery up to this day as follows:

Year ending—	Number of cod taken.	Barrels of liver obtained.	Barrels of white oil.
March 5, 1881.....	13, 000, 000	27, 500	1, 400
March 5, 1882.....	5, 500, 000	7, 650	240
March 5, 1883.....	6, 000, 000	4, 100	180

Usually 250 to 400 codfish give 1 barrel of liver. This year, from 700 to 1,100 are wanted. Usually 2 barrels of liver give 1 barrel of oil. This year, 4 or 5 barrels of liver are wanted.

172 WILLIAM STREET, NEW YORK, *April 2, 1883.*

**89.—UNEXPLAINED VARIATIONS IN THE YIELD OF OIL FROM COD LIVERS.****By Capt. N. E. ATWOOD.**

[From letter to Prof. S. F. Baird, written upon reading the foregoing letter.]

In my long experience in the fisheries of this locality I have given much attention to the condition of the livers of cod, but more especially so since 1849 when I commenced to manufacture cod-liver oil for medicinal purposes. I have bought the livers as they came in fresh every winter since that time.

The winter school of cod usually comes in here in December and stops until March. In former years there seemed to be no great difference in the condition and quality of the livers from year to year. I think it took from 2½ to 3 barrels of livers to yield a barrel of oil until about 1872. For several winters after, we had a large school of excellent cod visit us; indeed, the best I have ever seen. Their livers yielded a large quantity of excellent oil. It took only 2 to 2½ barrels of livers for a barrel of oil. During the winter ending March, 1878, we had an abundance of cod, but they were thin and poor when compared with those of former years. In their mouths we occasionally found such hooks as are used by the French fishermen on the banks of Newfound-